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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,862	06/27/2005	Ken Nishimura	043888-0384	4257
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EXAMINER				
RHEE, JANE J				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
09/03/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,862

Applicant(s)

NISHIMURA ET AL.

Examiner

JANE RHEE

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CD/C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 7/10/08

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/10/08 has been entered.

Rejections Withdrawn

2. The 35 U.S.C. 103(a) rejection of claims 1,5-16 unpatentable over Takatani et al. in view of Thibault et al. has been withdrawn due to applicant's amendment filed on 7/10/08.

Rejection Repeated

3. The U.S.C. double patenting rejection of claims 1,8-13,16 over copending application 10540867 has been repeated as previously made in office action 10/17/07.

New Rejections

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new limitation is "the conductive area of the first current collector is not positioned on the second side face and the conductive area of the second current collector is not positioned on the first side face." Any negative limitation or exclusionary proviso must have basis in the original disclosure. The mere absence of a positive recitation is not basis for an exclusion. MPEP 2173.05(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,5-6,10,12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Asano et al. (JP06-020677).

As to claim 1, Asano et al. discloses an electrochemical device having an electrode plate assembly that comprises: (a) at least one first electrode (figure 1 number 4); (b) at least one second electrode (figure 1 number 3); and (c) a separator interposed between the first electrode and the second electrode (figure 1 number 5), wherein said electrode plate assembly includes a PTC devices (figure 1 number 13) said first electrode (a) comprises a first current collector sheet having a conductive area and an insulating area and at least one first electrode mixture layer carried thereon (figure 1 number 4,10), said second electrode (b) comprises a second current

collector sheet having a conductive area and an insulating area and at least one second electrode mixture layer carried thereon (figure 1 number 6,3), said electrode plate assembly is a layered-type electrode plate assembly obtained by layering said first electrode, said second electrode and said separator (figure 1), and the conductive area of said first current collector sheet is connected to a first terminal on a first side face of said layered-type electrode plate assembly (figure 1 number 8), the conductive area of said second current collector sheet is connected to a second terminal on a second side face of said layered-type electrode plate assembly (figure 1 number 15), the insulating area of the first current collector sheet is positioned on the second side face (figure 1 number 6) and the insulating area of the second current collector sheet is positioned on the first side face (figure 1 number 10), wherein the insulating area of the first current collector protrudes to the second terminal (figure 1 number 6), and the insulating area of the second current collector protrudes to the first terminal (figure 1 number 10) and the conductive area of the first current collector is not positioned on the second side face and the conductive area of the second current collector is not positioned on the first side face (figure 1).

As to claim 5, Asano et al. discloses wherein said PTC device is shaped like a sheet (figure 1 number 13).

As to claim 6, Asano et al. disclose wherein said PTC device is positioned on said first side face or said second side face (figure 1 number 13).

As to claim 10, Asano et al. discloses wherein said first side face and said second side face are positioned on opposite sides of said layered-type electrode plate assembly (figure 1, top and bottom).

As to claim 11, wherein a first insulating material portion is provided between said first terminal and said first side face for insulating said first terminal from said second electrode, and a second insulating material portion is provided between said second terminal and said second side face for insulating said second terminal from said first electrode, Thibault et al. teaches a first current collector sheet having an insulating area and a second current collector sheet having an insulating area (paragraph 0014,0015) for the purpose of providing dimensional stability of the cell stack (paragraph 0149).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Asano et al. with a first current collector sheet having an insulating area and a second current collector sheet having an insulating area in order to provide dimensional stability of the cell stack (paragraph 0149) as taught by Thibault et al.

Furthermore, since Asano et al. teaches that the first current collector is positioned on the second side and the second current collector is position on the first side (figure 2 number 12 and 10) and Thibault et al. teaches a first current collector sheet having an insulating area and a second current collector sheet having an insulating area (paragraph 0014,0015), it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Asano et

al. with a first insulating material portion is provided between said first terminal and said first side face for insulating said first terminal from said second electrode, and a second insulating material portion is provided between said second terminal and said second side face for insulating said second terminal from said first electrode in order to provide dimensional stability of the cell stack as taught by Thibault et al. (paragraph 0149).

As to claim 12, Asano et al. discloses, wherein said electrode plate assembly is a wound-type electrode plate assembly obtained by layering and winding said first electrode, said second electrode and said separator (figure 1).

As to claim 13 Asano et al. discloses wherein the conductive area of said first current collector sheet is connected to a first terminal on a first bottom face of said wound-type electrode plate assembly, the conductive area of said second current collector sheet is connected to a second terminal on a second bottom face of said wound-type electrode plate assembly, the insulating area of said first current collector sheet is positioned on said second bottom face, and the insulating area of said second current collector sheet is positioned on said first bottom face as discussed above (figure 1).

As to claim 14, Asano et al. discloses wherein said PTC device is shaped like a flat plate or a round plate (figure 1 number 13).

As to claim 15, Asano et al. discloses wherein said PTC device is positioned on said first bottom face or said bottom face (figure 1 number 13).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asano et al. in view of Takatani (JP07-220755).

Asano et al. discloses the electrochemical device described above.

As to claim 7, Asano et al. fail to disclose wherein said PTC device is positioned in parallel with said first electrode, said second electrode and said separator in said layered-type electrode plate assembly.

Takatani teaches wherein said PTC device is positioned in parallel with said first electrode, said second electrode and said separator in said layered-type electrode plate assembly for the purpose of controlling the current in the secondary battery (paragraph 0009).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Asano et al. with said PTC device that is positioned in parallel with said first electrode, said second electrode and said separator in said layered-type electrode plate assembly in order to control the current in the secondary battery (paragraph 0009).

7. Claims 8-9,11,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano et al. in view of Thibault et al. (20010003863).

Asano et al. discloses the electrochemical device described above.

As to claim 8, Asano et al. fail to disclose wherein the insulating area of said first current collector sheet and the insulating area of said second current collector sheet are positioned on the side faces of said layered-type electrode plate assembly other than said first side face and said second side face, Thibault et al. teaches a first current collector sheet having an insulating area and a second current collector sheet having an insulating area positioned on the side faces of said layered-type electrode plate assembly other than said first side face and said second side face (paragraph 0014,0015) for the purpose of providing dimensional stability of the cell stack (paragraph 0149).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Asano et al. with a first current collector sheet having an insulating area and a second current collector sheet having an insulating area positioned on the side faces of said layered-type electrode plate assembly other than said first side face and said second side face in order to provide dimensional stability of the cell stack (paragraph 0149) as taught by Thibault et al.

As to claim 9, wherein said layered-type electrode plate assembly has a side face on which the insulating area of said first current collector sheet and/or the insulating area of said second current collector sheet are/is positioned, other than said first side face and said second side face, Thibault et al. teaches a first current collector

sheet having an insulating area and a second current collector sheet having an insulating area positioned on the side faces of said layered-type electrode plate assembly other than said first side face and said second side face (paragraph 0014,0015) for the purpose of providing dimensional stability of the cell stack (paragraph 0149).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Asano et al. with a first current collector sheet having an insulating area and a second current collector sheet having an insulating area positioned on the side faces of said layered-type electrode plate assembly other than said first side face and said second side face in order to provide dimensional stability of the cell stack (paragraph 0149) as taught by Thibault et al.

As to claim 16, Asano et al. fail to disclose wherein a first insulating material portion is provided between said first terminal and said first bottom face for insulating said first terminal from said second electrode, and a second insulating material portion is provided between said second terminal and said second bottom face for insulating said second terminal from said first electrode.

Thibault et al. teaches a first current collector sheet having an insulating area and a second current collector sheet having an insulating area (paragraph 0014,0015) for the purpose of providing dimensional stability of the cell stack (paragraph 0149).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Asano et al. with a first current collector sheet having an insulating area and a second current collector sheet having an

insulating area wherein a first insulating material portion is provided between said first terminal and said first bottom face for insulating said first terminal from said second electrode, and a second insulating material portion is provided between said second terminal and said second bottom face for insulating said second terminal from said first electrode in order to provide dimensional stability of the cell stack (paragraph 0149) as taught by Thibault et al.

Response to Arguments

8. Applicant's arguments with respect to claims 1,5-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANE RHEE whose telephone number is (571)272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jane Rhee/
Primary Examiner, Art Unit 1795